

15

Alternative Hydrophilic Elements

FIG. 2A

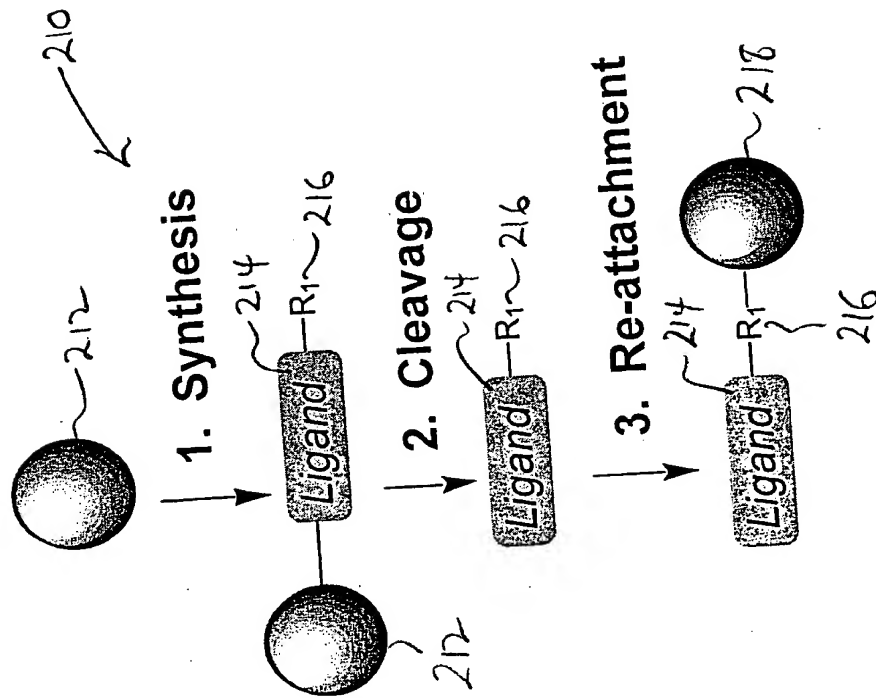


FIG. 2A

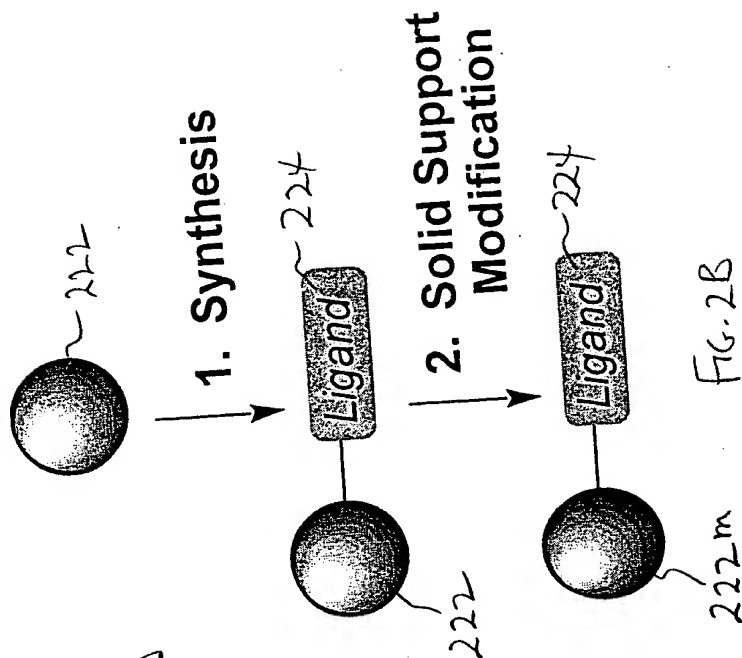


FIG. 2B

ANIONIC RESINS

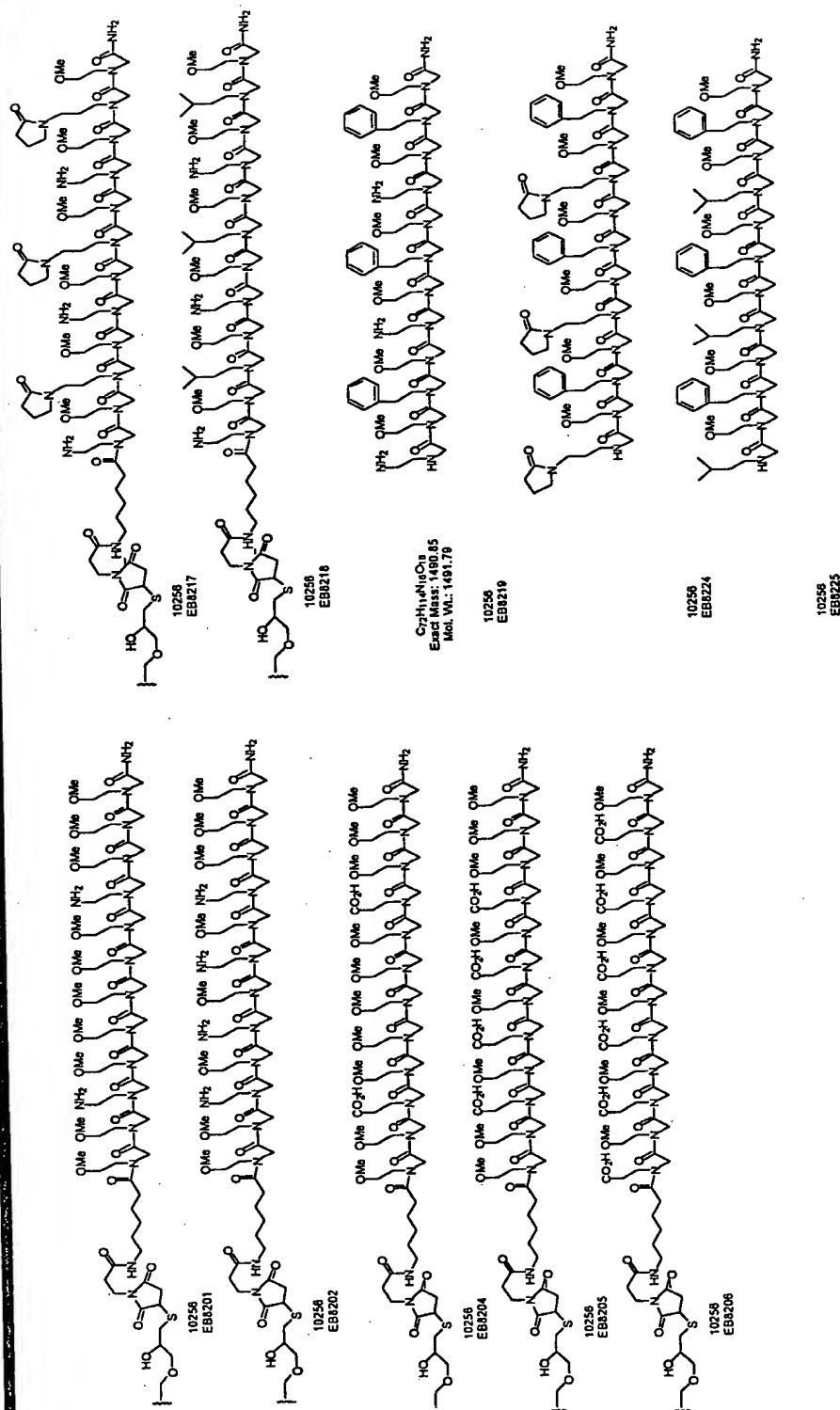


FIG. 3A

HYDROPHOBIC RESINS

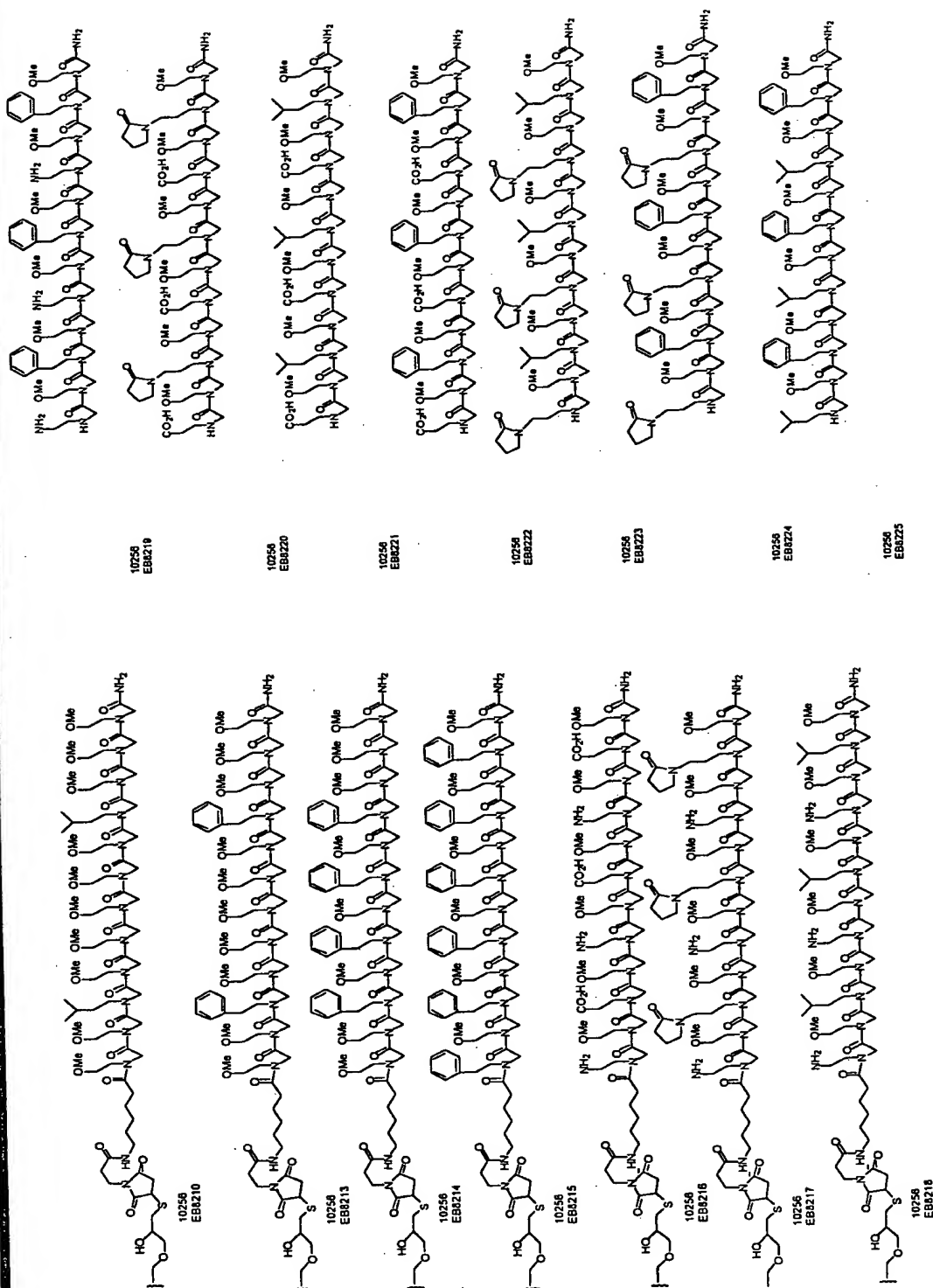


FIG. 3B

CATIONIC RESINS

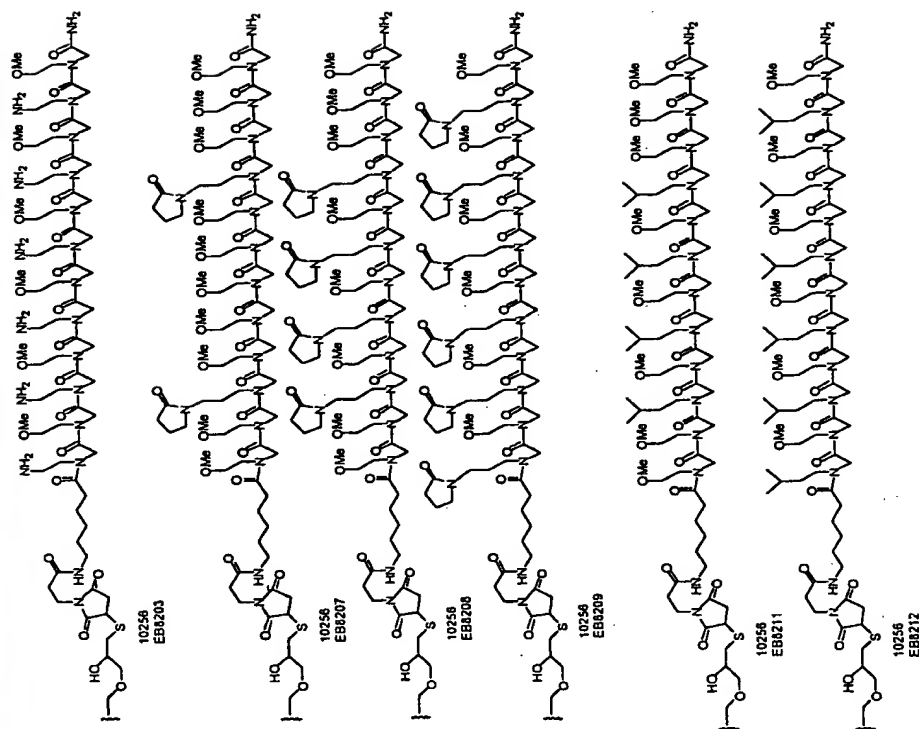


FIG. 3C

FIG. 4 is a schematic diagram of a system for screening a library of nucleic acid sequences for binding to a target protein. The system includes an array of intermediate affinity hydrophilic supports (402) which are used to immobilize the nucleic acid sequences. The array is connected to a miniature affinity chromatography column (404) which is used to separate the sequences based on their binding to the target protein. The separated sequences are then screened by electrophoresis (406) to identify the sequences that bind to the target protein. The results of the screening are shown in the electrophoresis gel (408).

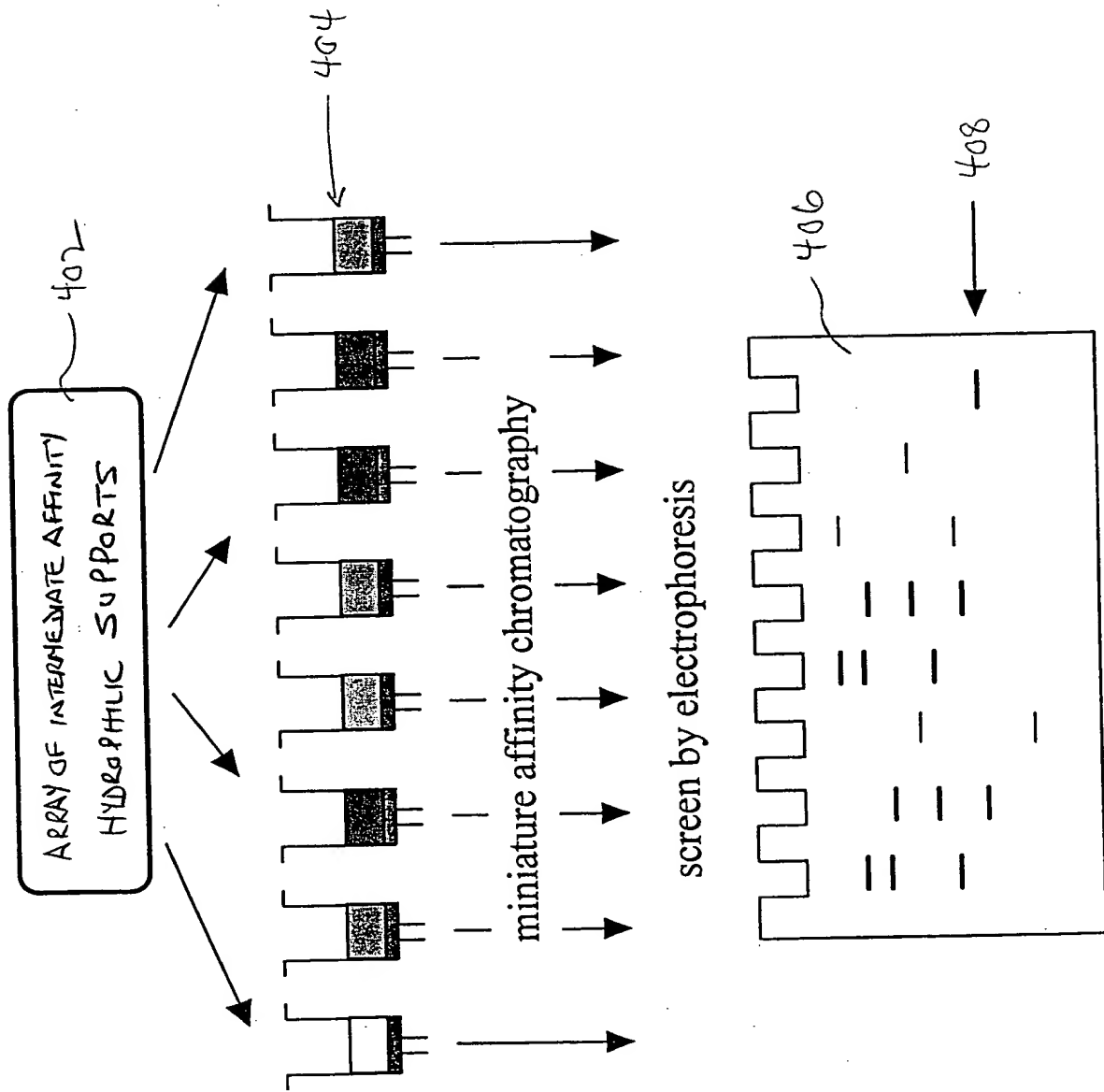
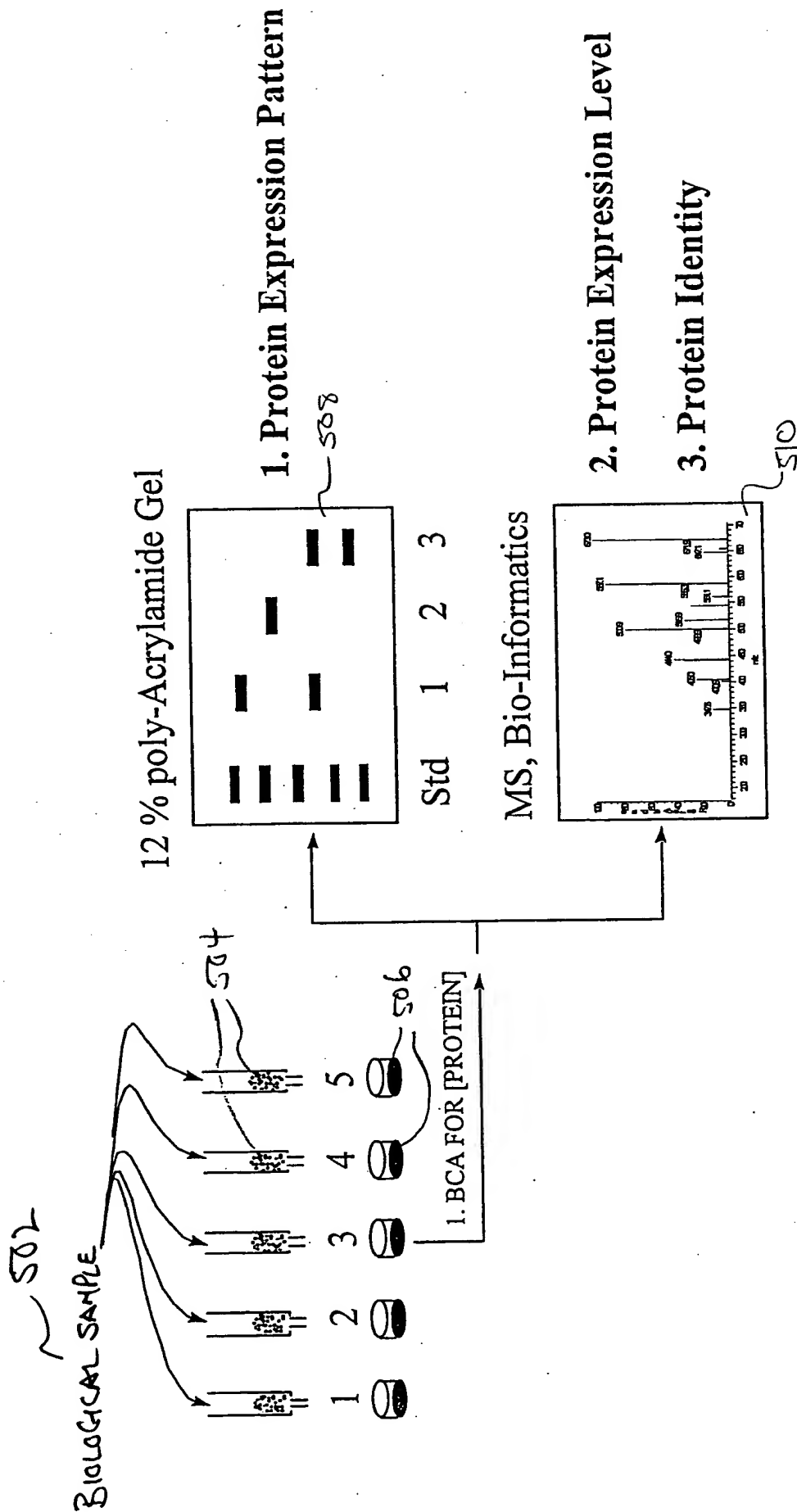
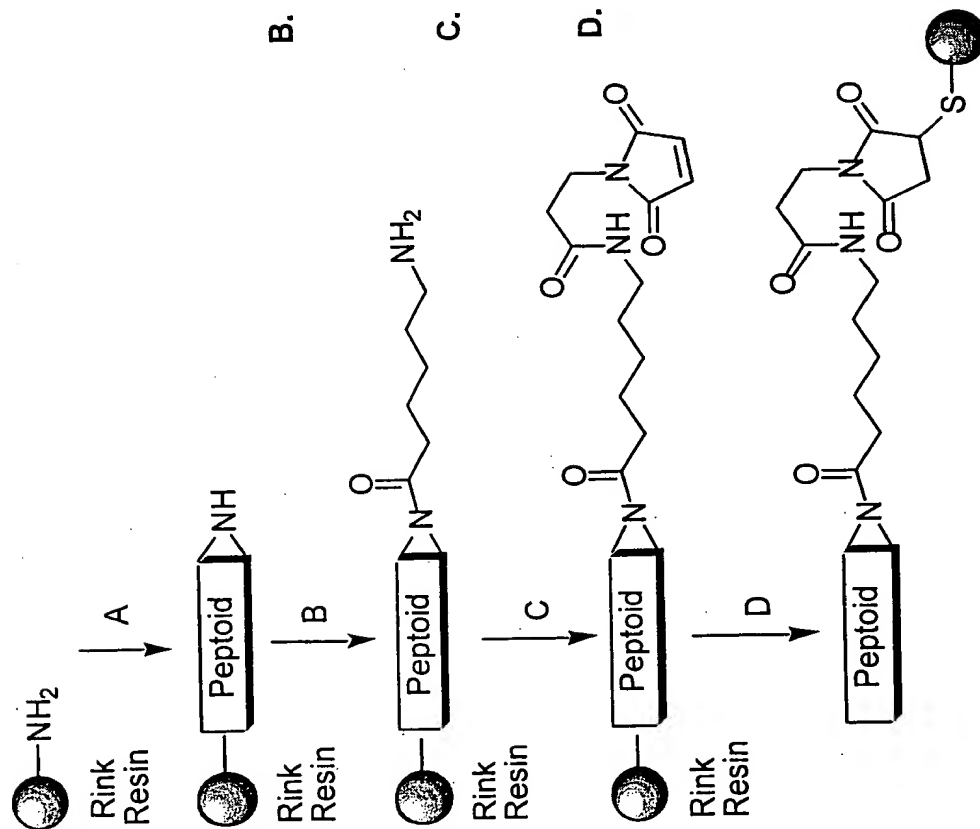


FIG. 4



== Synthetic Ligand Display on Hydrophilic Solid Support

FIG. 5



Cross Linked
Sephacrose 4B

FIG. 6

A. Peptoid Synthesis (~400 mg)

Acylation

- 4.25 ml 1.2 M Bromoacetic Acid/DMF
- 1.0 ml neat DIC
- 1 x 40 minutes @ 35°C

Displacement

- 4.25 ml of 1M Amine in NMP
- 1 x 40 minutes @ 35°C

B. Acylation-Deprotection

1. *N*-(Fmoc)-Aminohexanoic acid (0.4 M), HOBT (0.4M), DIC (0.44M), @ 35°C, 1 hr. Ninhydrin Test
2. 20 % Piperidine in DMF (10 min)

C. Acylation

1. 3-Maleimidopropionyl-OSu Ester (0.2 M, 4 eq.) @ 35°C, 1 hr
Ninhydrin Test

D. Cleavage-Purification-Addition

1. 20 % [v/v] TFA/CH₂Cl₂, 20 ml, 30 minute, Filtration.
2. Fast Evaporation using N₂.
3. 100 % AcOH (4 mL) is added and Lyophilized.
4. 50 % [v/v] CH₃CN in H₂O (8 mL) is added and Lyophilized
5. 200 % Mol Peptoid-Maleimide over the molar amount of sulphydryl to be coupled. Monitoring with Ellman's reagent.

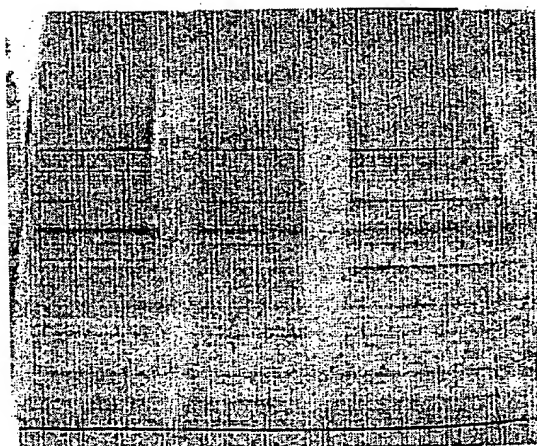


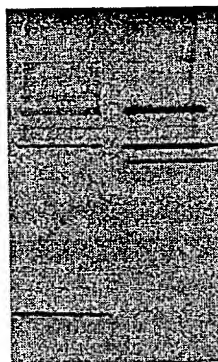
Figure 7

Whole Cell
Lysate



100%

8224 8225



7% 11%

Figure 8

Protein Differential Display

Proteomic differential display of Breast Cancer tissue:
Low Metastatic Vs. High Metastatic

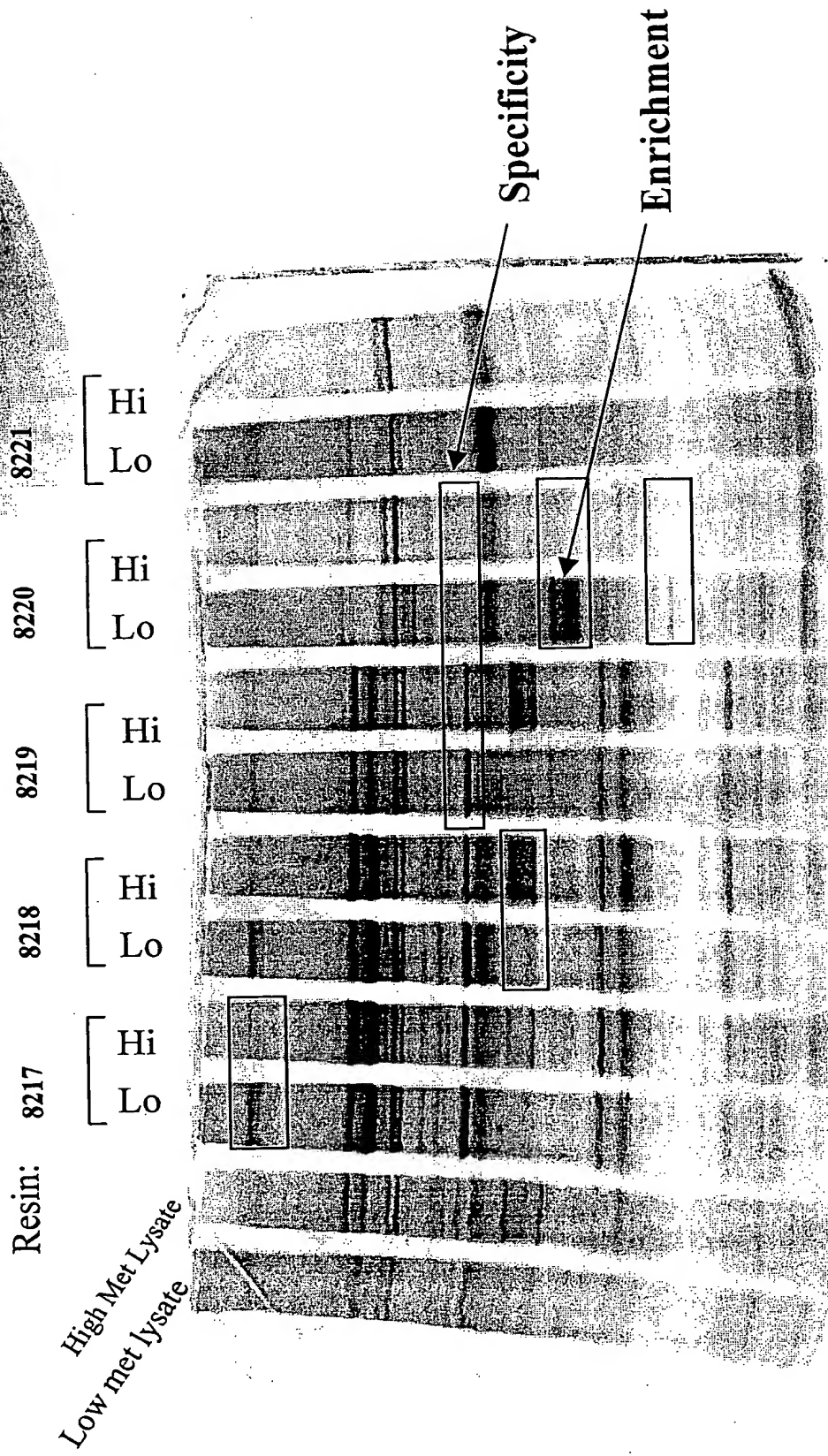


FIG. 9

FIG. 11(1)

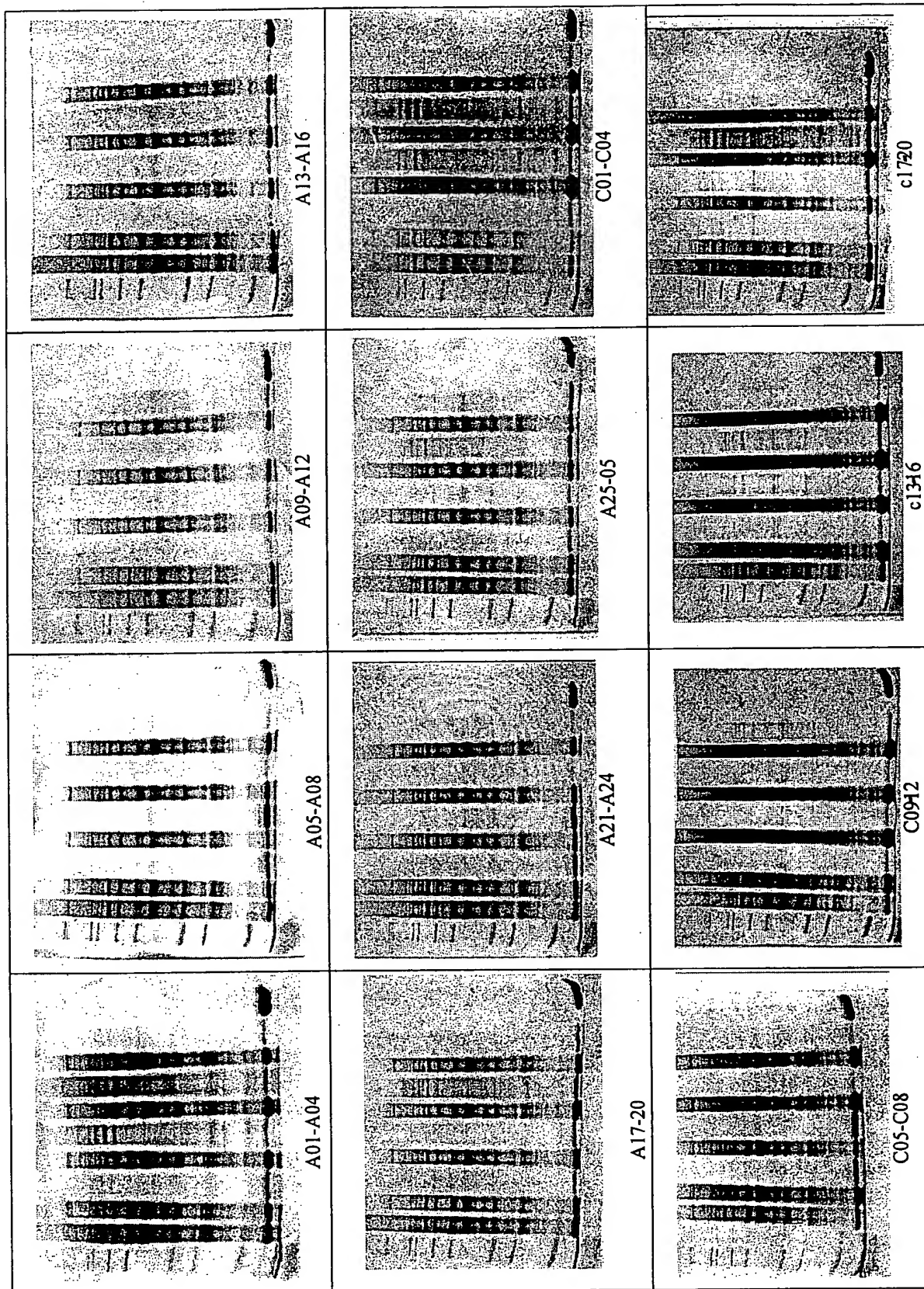


FIG. 11(1)

